UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,399	10/11/2001	Kenneth D. Rector	9884	1275

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EXAMINER
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ART UNIT	PAPER NUMBER
2127	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 October 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

      a.   The following terms are indefinite:

          i.   In claim 1, "database sessions" (line 5) is indefinite because it is unclear whether there is a singular or plural session for each user logon;

          ii.   In claim 1, "a database session" (line 6) is indefinite because it is unclear whether there is a singular or plural session for each user logon. In addition, it is not made explicitly clear in the claim language whether or not this database session is the same as the "database sessions" in line 5.

          iii.   In claim 1, "the group" (lines 13 and 14) is indefinite because it is not made explicitly clear in the claim language which group of "each group" it is referring to.

          iv.   In claim 1, "that task" (lines 13 and 14) is indefinite because it is not made explicitly clear in the claim language which particular task is being referred to in "that task".

v. In claim 2, "assigning a group of the second set of groups" (line 19) is indefinite because it is unclear and does not make any sense. It is unclear whether or not the assigned group is supposed to be the third group that is based off the second group, or if a subgroup is being created within the second group. The current claim language does not provide any support for that.

vi. In claim 3, "one of a third set of groups" (line 26) is indefinite because it is not made explicitly clear in the claim language whether this is supposed to mean one out of three sets of groups or one out of the particular third set.

vii. In claim 4, "for each resource usage range" (line 5) is indefinite because it is not made explicitly clear in the claim language whether this if for all group or just the third group.

viii. In claim 10, it is rejected for the same indefinite reasons as stated in claim 1 above.

ix. In claim 12, it is rejected for the same indefinite reasons as stated in claim 3 above.

x. In claim 20, "data-storage facilities" is indefinite because it is not made explicitly clear in the claim language whether or not this is located within the node. There has not been a structural relationship established between the node and the data-storage facilities.

xi. In claim 20, "two groups" (line 11) is indefinite because it is not made explicitly clear in the claim language whether or not this is the same

as the "two different groups" (line 10) or if two new groups are being

introduced.

b.   The following lacks antecedent basis:

xii.   In claim 1, "each task" (lines 7 and 10);

xiii.   In claim 1, "each group of the second set of groups" (lines 9 and

11);

xiv.   In claim 1, "the session" (line 8);

xv.   In claim 2, "each group" (line 19);

xvi.   In claim 3, "each group in the third set of groups" (line 28);

xvii.   In claim 10, it is rejected for the same reasons as stated in claim 1

above.

xviii. In claim 12, it is rejected for the same reasons as stated in claim 3

above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   **Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliot**

et al. (hereinafter Elliot) (US 2002/0064149 A1).

4.   As to claim 1, Elliot teaches a method for scheduling access to processor

resources of a database, the method comprising the steps of:

initiating database sessions in response to user logon *([3270])*;

initiating tasks in response to commands received from a database session (from

interface after logon) *([3270])*;

classifying each task in one of a first set of groups based at least in part on one or

more logon account attributes associated with the session that initiated that task *([1121]*,

[3305]);

assigning a weight to each group of the first set of groups (priority queuing

technique such as Weighted Fair Queuing) *([0598])*;

classifying each task in one of a second set of groups *([1121])*;

assigning a weight to each group of the second set of groups (priority queuing

technique such as Weighted Fair Queuing) *([0598])*; and

limiting (priority scheduling and Prioritizing Access) each task's access to

processor resources of the database based at least in part on the weight of the group from

the first set in which that task in classified and also based at least in part on the weight of

the group from the second set in which that task in classified *([0598], [0582])*.

5.   As to claim 2, Elliot teaches where classifying each task in one of the second set

of groups includes:

classifying each database session in one of a third set of groups based at least in part on one or more logon account attributes associated with that session *([1121], [3305])*;

assigning one or more time periods to each group of the third set of groups *([0598])*;

for each time period, assigning a group of the second set of groups *([0598])*;

determining the current time *([1357] and [3652])*; and

classifying each task in the group of the second set of groups corresponding to the time period for that group of the third set of groups in which the session that initiated that task is classified that includes the current time *([1121], [1357] and [3652])*.

6.   As to claim 3, Elliot teaches where classifying each task in one of the first set of groups includes:

classifying each database session in one of a third set of groups based at least in part on one or more logon account attributes associated with that session *([1121])*;

associating each group in the third set of groups with one group of the first set of groups *([0598])*; and

classifying each task in the group of the first set of groups that is associated with the group of the third set of groups in which the session that initiated that task is classified *([1121])*.

7.   As to claim 4, Elliot teaches where classifying each task in one of the second set of groups includes:

classifying each database session in one of a third set of groups based at least in part on one or more logon account attributes associated with that session *([1121])*;

assigning one or more resource usage ranges to each group of the third set of groups *(0598])*;

for each resource usage range, assigning a group of the second set of groups *([1355] and [1121])*;

determining a recent resource usage of each session *([0553] and [1083])*; and

classifying each task in the group of the second set of groups corresponding to the resource usage range for the group of the third set of groups in which the session that initiated that task is classified that includes that session's recent resource usage *([1121], [0053], [1083])*.

8.   As to claim 5, Elliot teaches where the recent resource usage is a current resource usage (current utilization statistics) *([1203], [1240])*.

9.   As to claim 6, Elliot teaches where the recent resource usage is a measurement of processor and input/output usage during a preceding time period *([1203], [1240])*.

10.   As to claim 7, Elliot teaches where the preceding time period is 60 seconds *([3940], [4008])*.

11.   As to claim 8, Elliot teaches where the extent to which access is limited is recalculated periodically (periodically generate statistical information) *([0889])*.

12.   As to claim 9, Elliot teaches providing device driver access (access device) to

tasks in order of a priority (a prioritizing access router) based at least in part on the

weight of the group from the first set in which each task in classified and also based at

least in part on the weight of the group from the second set in which each task in

classified *([0582])*.

13.   As to claim 10, it is rejected for the same reasons as stated in the rejection of

claim 1.

14.   As to claim 11, Elliot teaches where tasks are classified in one of the first set of

groups based at least in part on one or more logon account attributes associated with the

session that initiated that task *([1121])*.

15.   As to claim 12, it is rejected for the same reasons as stated in the rejection of

claim 2.

16.   As to claim 13, it is rejected for the same reasons as stated in the rejection of

claim 3.

17.   As to claim 14, it is rejected for the same reasons as stated in the rejection of

claim 4.

18.   As to claim 15, it is rejected for the same reasons as stated in the rejection of claim 5.

19.   As to claim 16, it is rejected for the same reasons as stated in the rejection of claim 6.

20.   As to claim 17, it is rejected for the same reasons as stated in the rejection of claim 7.

21.   As to claim 18, it is rejected for the same reasons as stated in the rejection of claim 8.

22.   As to claim 19, it is rejected for the same reasons as stated in the rejection of claim 9.

23.   As to claim 20, Elliot teaches a scheduled resource access database system (similar to the rejection of claim 1), comprising:

one or more nodes *([1027])*;

a plurality of CPUS, each of the one or more nodes providing access to one or more CPUS *([1027])*;

a plurality of virtual processes, each of the one or more CPUS providing access to one or more virtual processes *([0019])*;

each virtual process configured to manage data stored in one of a plurality of data-storage facilities *([1578])*; and

a priority scheduler component (using the priority queuing technique such as Weighted Fair Queuing) configured to control access to the virtual processes by sessions of the database system, the priority scheduler component configurable to classify tasks initiated by sessions in at least two different groups at the same time and limit access to the virtual processes by each task based at least in part on two groups in which that task in classified *([0598], [0582], [1121])*.

24.   As to claim 21, Elliot teaches comprising a clock and where the priority scheduler component is configurable to classify a task initiated by user in a group based at least in part on the time of day *([1908])*.

25.   As to claim 22, Ellliot teaches a resource usage monitor that is configurable to record recent resource usage of a session and where the priority scheduler component is configurable to classify a task initiated by a session in a group based at least in part on that session's recent resource usage (current utilization statistics) *([1203] and [1240])*.
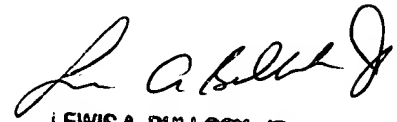
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-

3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER

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12/22/04